

SPONTANEOUS HYBRIDS BETWEEN CERASTIUM TOMENTOSUM LINN. AND C. ARVENSE LINN.

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The "White Rock" or "Snow in Summer" of our gardens — *Cerastium tomentosum* Linn. is a native of southern Europe, now commonly cultivated as a rock garden plant throughout the temperate world. It is a very vigorous perennial which rapidly spreads and takes over the whole of the rock garden, hence its rhizomes are frequently dug up and thrown onto roadsides, river banks and rubbish dumps where it sometimes becomes established and competes successfully with the native flora. *C. arvense* Linn. is a native species in North America where the most widely occurring form is diploid. However the common European form is tetraploid ($2n = 72$ as in *C. tomentosum*) and has been introduced into northeastern North America where it frequently becomes a weed along roadsides, riverbanks, and in old pasture and quarries etc. Whether its introduction to this continent was deliberate or accidental is uncertain, though the former is not improbable for it makes an attractive rock garden plant, apart from its propensity to spread too vigorously.

In the mid and upper reaches of the Grand River valley in southern Ontario, both these species occur; *C. tomentosum* as a common garden plant persisting in derelict gardens and occasionally established as a garden throwout; and *C. arvense* as a well established weed on road, rail and river banks etc. Hybrids between the two species have been discovered at Fergus, Waterloo and Galt. At Fergus the hybrid plants are growing amongst concrete slabs on a grassy roadside bank at the Elora end of the town. The area probably originated as a rockery but has long been neglected, and both parent species are growing alongside the hybrids. Further plants of the hybrid occur below the road, on old ballast used in constructing the road and dumped on the river bank. At Waterloo the plant was

found in an old rockery of a long since derelict farm house, and has since been transplanted into several rock gardens in the town. Neither parent now grows in the immediate vicinity of the old farm house and the nearest colony of *C. arvensis* is several miles away. At Galt the hybrid plants are growing amongst grass on cindery ground on an old rubbish tip, and in the lawn of an adjoining house on the Brantford side of the town between route 24 and the Grand River. Neither parent is growing in the immediate vicinity but *C. arvensis* occurs along the Grand River about a mile distant.

The Fergus and Waterloo plants appear to be the F_1 hybrid and are intermediate between the two parents, but somewhat closer to *C. tomentosum* in general appearance, looking like a rather poorly developed plant of that species in which the white indumentum is less dense. The Galt colony apparently consists of F_2 segregates probably resulting from selfing of the F_1 hybrid. They are smaller, very variable plants and several of them are nearer to the *C. arvensis* parent in general appearance.

These hybrids flower copiously and produce a number of short capsules, the teeth of which barely exceed the calyx. Most of the ovules in these abort, but frequently one or two, occasionally more, very large seeds are formed. These are fertile and the progeny show extensive segregation, ranging from close to one or other of the parents, to various combinations of characters intermediate between the parents. It is probable that these seeds result from selfings rather than pollination from either parent.

Hybrids between *C. tomentosum* and *C. arvensis* are rarely encountered in Europe where the species are native and sometimes grow in close proximity. The only reference in the literature to such hybrids, that I have been able to locate, is Ascherson and Graebner 1919 where they are referred to *C. maureri* and *C. rigoi* without authority or supporting information. Neither of these names appears to have been taken up by subsequent workers, perhaps because of the very rare occurrence of this hybrid.

REFERENCE

- ASCHERSON, P. and GRAEBNER, P. 1919. Synopsis der Mitteleuropaischen flora. 5, 1:636.

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AMPHIPRORA ORNATA BAILEY —
A SECOND STATION IN NEW ENGLAND

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During continuing studies of the phytoplankton of the Connecticut River I collected a single specimen of *Amphiprora ornata* Bailey. As the accompanying figure shows the species is distinct enough in structure so as to make it readily recognizable.

The specimen was recovered from material taken by a vertical haul with a Wisconsin-type sampler in 46 feet of water. The collecting station is located 0.1 miles north of the dam at Vernon, Vermont. All of the stations being utilized during this study are within five miles of Vernon. The collection was made just before 12 Noon on June 5, 1970. At this time the air temperature was 68 degrees F., and the water temperature was 66 degrees F.

Although the collecting station is physically closer to Vermont than New Hampshire, ownership of the Connecticut River below high water mark is vested in the State of New Hampshire. Thus, *Amphiprora ornata* Bailey is reported for the Town of Hinsdale, Cheshire County, New Hampshire.

This appears to be only the second collection for New England. The previous station being somewhere in the vicinity of New Haven, Conn., reported by Terry (1907). Other reported stations include the type from Florida by